

"To care for him who has borne the battle, and for his widow and orphans."

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ENTRUSTED AT WASHINGTON FOR THE SECOND CLASS MATTER.

WASHINGTON, D. C., SEPT. 22, 1904.

OFFICE: 259 PENNSYLVANIA AVENUE N.W.

It is reported that 20 Cossacks have been wounded. It is about time that those much-boasted fellows were actually doing some fighting.

The Japanese appear to have decided to let starvation do its work in Port Arthur, and they will not have to wait long.

The news says that the Russian sutlers lost everything they had in the retreat recently from Liao-Yang. Seems to us we have heard of some such occurrences in other wars.

There is the usual conflict in the Russian reports. A week ago we were assured that the Russian troops retreated from Liao-Yang "in the best of spirits, only angry and confused as to why they had to retreat at all." Now they say "the spirit of the Russian troops, which bordered upon a panic, has been restored."

COL. WILLIAM A. ACSTINE, who was said to be the oldest surviving graduate of West Point, died at his home Sept. 4. He graduated in 1838, in the same class with Beauregard, William F. Barry, William A. Nichols, L. C. Easton, Irvin McDowell, William J. Hardee, R. S. Granger, and A. J. Smith. He was assigned to the artillery and brevetted Major for gallantry at Contreras and Churubusco. He was a Major in the 3d U. S. Art. at the beginning of the war, served as Mustered and Recruiting officer, and was retired Feb. 20, 1862, for disability resulting from service.

The question is to the front as to what Kuropatkin can sustain his army on at Harbin. It is confessedly impossible for him to draw supplies for that host over the Siberian Railroad, and he will have to rely largely on what can be gotten from that country. The people of northern Manchuria are small farmers, who raise but little more than they want for their own support, but there are so many of them that they altogether can furnish a considerable amount. A coarse flour is made from wheat, which can be eaten during cold weather, and there is also a great deal of millet, which can be ground into something like our cornmeal and made into a mush, which forms a large portion of the food of the people. The curd of the bean is also a good cold-weather food, and there is said to be immense quantities of this. The Chinese raise a great deal of buckwheat and a considerable quantity of potatoes, while there must be, by going some distance, a supply of beef. So that a partial support of the army is believed to be in his sight.

A SHOCK has been sent through the whole Grand Army of the Republic at the news of the death of Comrade Henry E. Taintor, which occurred at his home in Hartford, Conn., Aug. 31. Comrade Taintor has been a familiar figure at the National Encampments for many years, and his wisdom and earnestness have been of the greatest value in the councils of the Order. He went to the Encampment at Boston in apparently his usual health. His cheerful manner and pleasant greeting to his comrades seemed to grow with the years. After the parade he complained of an attack of gastritis, and a physician was called. He improved somewhat, and was able to return to his home, but another attack occurred while there, and he passed away. Comrade Taintor enlisted Jan. 14, 1864, from Yale University, in Co. A, 1st Conn. H. A. His intelligence and soldierly were such that he was promoted rapidly to Sergeant, Sergeant-Major, and finally received a commission as Second Lieutenant. Yale gave him his degree upon returning home, and he was admitted to the bar in 1868. He held many positions of trust and honor, and was offered many more which he was compelled to decline. He was always an earnest member of the Grand Army of the Republic, was Commander of his Department in 1887, was Judge-Advocate-General, and was a member of the G. A. R. National Pension Committee, where he did good work in preparing the evidence which led to the removal of Commissioner Evans. A great many looked forward to his being Commander-in-Chief, and his name would have been presented long ago, had not his important duties as a counselor for various great corporations prevented him giving time to the discharge of the duties of that position. No comrade in the Order was held in higher esteem and will be more sincerely mourned by the comrades of New England.

ADDITIONAL STAFF APPOINTMENTS.

Commander-in-Chief W. W. Blackmar announces the following additional staff appointments:

Lee S. Estelle, of Omaha, Neb., Inspector General.

James M. Schoonmaker, of Pittsburgh, Pa., Senior Aid-de-Camp and Chief of Staff.

J. Henry Holcomb, of Philadelphia, Assistant Quartermaster-General and Custodian of Records.

W. F. Martin, of Decatur, Ill., and Samuel Wright, of Boston, National Color Bearers.

The Executive Committee of the Council of Administration will consist of: Thomas G. Sample, Allegheny, Pa.; George W. Cook, Denver, Colo.; William H. Armstrong, Indianapolis, Ind.; L. W. Collins, St. Cloud, Minn.; John W. Hershey, Springfield, Mass.; S. C. James, Centerville, Iowa; and J. Cory Winans, Troy, Ohio.

PENNSYLVANIA AT ANTIETAM.

Sept. 17, 1862—42 years ago last Saturday, was the bloodiest single day in American history. The Army of the Potomac, hastily reorganized after the Second Manassas Campaign, and raised to a strength of 105,000 combatants, had crossed the Potomac to drive Lee's army out of Maryland. Lee promptly fell back from Frederick, where he had been threatening Washington and Baltimore, and Sept. 14 was driven from the line of South Mountain, where he had halted to delay the Army of the Potomac, while a detachment of his forces was taking Harper's Ferry. He fell back behind Antietam Creek and stood at bay until the remainder of his troops could come up from Harper's Ferry.

At daylight on the morning of Sept. 17 Lee's left was energetically attacked by the First Corps under Gen. Joseph Hooker, the Twelfth Corps under Gen. Mansfield, coming up to join in the attack. Still later the Second Corps arrived, under Gen. E. V. Sumner. In the meanwhile the Ninth Corps—Gen. J. D. Cox—was demonstrating against Lee's right and against a stone bridge across Antietam Creek. The Sixth Corps, under Gen. Franklin, and the Fifth Corps, under Gen. Fitz-John Porter, were in reserve.

The battle raged all day, with fierce aggression on the one side and determined stubbornness on the other. By evening Lee's army had been forced back about a mile along its whole line. All its men had been put in, and it was in a very precarious position. Had the battle been renewed the next morning by the Union troops who had not been engaged, the destruction of Lee's army would have been certain, and the war would have probably ended. But Gen. McClellan decided otherwise, and Lee was allowed to escape with his shattered army across the Potomac.

The Union loss was 2,108 killed, 9,549 wounded, and 753 missing—a total of 12,410.

What the rebel loss was will never be known, but as it was man-to-man fighting all day, the presumption must be that a Union bullet was as deadly as a rebel shot.

Pennsylvania had an unusually large share in the battle of Antietam. Gen. Geo. B. McClellan, commanding the Army of the Potomac, was born in Philadelphia, of an old Pennsylvania family. Gen. Geo. G. Meade, who commanded a division in the First Corps, and the First Corps after Hooker was wounded, was a Pennsylvania-born and bred, and Gen. Hancock, Harpersburg, Harpersburg, and Crawford, who took prominent parts, were all Pennsylvanians.

In each corps and division were splendid veteran regiments from Pennsylvania, and much of the very hardest fighting fell upon them, as the following official report of their casualties will show:

FIRST CORPS.			
	Killed.	Wounded.	Missing.
56th Pa.	1	45	1
107th Pa.	19	42	5
88th Pa.	10	45	5
11th Pa.	12	82	3
11th Pa.	13	107	4
Battery F.	3	8	
Battery C.	1	2	
1st Pa. Res.	3	22	
4th Pa. Res.	3	21	
5th Pa. Res.	3	7	
6th Pa. Res.	8	61	
13th Pa. Res.	5	20	
5d Pa. Res.	5	43	
7th Pa. Res.	12	60	
8th Pa. Res.	12	44	
9th Pa. Res.	17	66	
10th Pa. Res.	9	3	
11th Pa. Res.	15	15	
12th Pa. Res.	13	46	
Battery A.	1	3	
Battery B.	2		

SECOND CORPS.			
	Killed.	Wounded.	Missing.
81st Pa.	7	44	
84th Pa.	4	18	
129th Pa.	19	58	
71st Pa.	26	95	
124th Pa.	38	163	
106th Pa.	10	63	
124th Pa.	10	114	
132d Pa.	32	146	

FOURTH CORPS.			
	Killed.	Wounded.	Missing.
61st Pa.	7	44	
82d Pa.	2		

SIXTH CORPS.			
	Killed.	Wounded.	Missing.
96th Pa.	1	1	
95th Pa.	1	9	
94th Pa.	1	4	

NINTH CORPS.			
	Killed.	Wounded.	Missing.
96th Pa.	8	46	
15th Pa.	1	36	
10th Pa.	1	10	
18th Pa.	8	51	
51st Pa.	21	99	
Battery D.	3		

TWELFTH CORPS.			
	Killed.	Wounded.	Missing.
46th Pa.	6	13	
124th Pa.	5	12	
125th Pa.	2	11	
128th Pa.	26	86	
28th Pa.	44	217	
11th Pa.	26	78	
Battery F.	1	3	

The following is the official report of Pennsylvania officers killed at Antietam: Col. James H. Childs, 4th Cav. Res. Lieut. Augustus T. Cross, 2d Res. Lieut. Wm. Weinfleiter, 2d Res. Capt. Florence H. Straub, 3d Res. Lieut. Harman P. Petrik, 5th Res. Capt. James M. Colwell, 7th Res. Lieut. Daniel L. Saunders, 7th Res. Lieut. John Lamblich, 9th Res. Capt. Hugh W. McNeil, 13th Res. Lieut. William Allison, 13th Res. Capt. Peter F. Laws, 28th Inf. Lieut. Joseph L. Markley, 28th Inf. Capt. George A. Brooks, 40th Inf. Lieut. William Cullen, 48th Inf. Capt. James B. Ingham, 50th Inf. Lieut. Col. Thomas S. Bell, 51st Inf. Lieut. J. Gilbert Beaver, 51st Inf. Lieut. Davis Hunsicker, 51st Inf. Lieut. John D. Weaver, 53d Inf. Capt. Francis V. Bierworth, 69th Inf. Lieut. Joseph McHugh, 69th Inf. Lieut. John Conroy, 71st Inf. Capt. Peter H. Willits, 72d Inf. Lieut. Adolphus W. Peabody, 72d Inf. Lieut. William H. Van Dike, 81st Inf. Lieut. William E. Bryan, 106th Inf. Lieut. Robert M. Johnston, 125th Inf. Col. Samuel Crossdale, 128th Inf. Capt. William H. Andrews, 128th Inf. Lieut. William A. Givler, 130th Inf. Col. Richard A. Oakford, 132d Inf. Lieut. Arthur C. Cranmer, 132d Inf. Capt. Arthur Corringan, 111th Inf.

The Legislature appropriated \$32,500 with which to erect monuments to 13 of the Pennsylvania organizations taking part in the battle, \$2,500 each, and \$2,500 for the expenses of the Commission, and last Saturday they were unveiled with impressive ceremonies in the presence of the Governor of Pennsylvania, his Staff, and a number of the distinguished men of the State, Commander-in-Chief Blackmar, Senior Vice-Commander-in-Chief John R. King, and a number of other prominent Grand Army men. The organizations to which monuments have been erected were as follows: Regiment, Commanding Officer, Casualties. 45th—Lieut. Col. John I. Curtin... 38

48th—Lieut. Col. J. K. Siegfried... 60	50th—Col. Edw. Overton... 57
51st—Col. John F. Hartranft... 129	100th—Lieut. Col. D. A. Leakey... 8
124th—Col. Joseph W. Hawley... 84	125th—Col. Jacob Higgins... 115
128th—Col. Samuel Crossdale... 118	130th—Col. Henry S. Zinn... 178
132d—Col. Richard A. Oakford... 122	137th—Col. Henry M. Bossert... 102

12th Cav., Lieut. Col. William Bell, sustained no loss.

Curry's Battery, Capt. George W. Du-rell, lost 3.

The survivors of each of these organizations have devoted much time and thought and not a little amount of money to preserve such a monument as would be a credit, and the result has been very fine. Each monument has an individuality as well as an artistic excellence. The monuments were each of them, dedicated in the morning by the survivors of the organizations, with the Governor, Commander-in-Chief, and others present, but not officiating. Owing to a dispute between the 48th Regimental Association as to their monument the Association was not present officially, but a large number of the survivors were, and the ceremonies were conducted by O. C. Boshysell. The monument is a fine statue of Gen. Nagle, the first Colonel of the regiment. After the monuments were unveiled the concourse assembled in the National Cemetery.

Col. Joseph W. Hawley, who commanded the 124th Pa., presided. The opening prayer was made by the Rev. Dr. Samuel Bolman, late Chaplain of the 48th Pa.

The transfer of the monuments was made by the Pennsylvania Antietam Battlefield Commission, of which Col. Hawley is Chairman, to the Governor of Pennsylvania. Gov. Penningback accepted the shafts in a brief speech, and in turn transferred them to the United States, represented by Acting Secretary of War Oliver, in the place of President Roosevelt, who was unable to attend.

The oration was delivered by Dr. John Richards Boyle, D. D., late of the 111th Pa. He made a splendid address, his subject being "Pennsylvania at Antietam," in which he lauded the bravery of the State troops that fought at Antietam. His address was largely historical. The exercises were concluded with singing "America" and the benediction pronounced by Rev. Joseph Evans, late Chaplain of the 124th Pa. The Indian Band of Carlisle, Pa., furnished splendid music during the exercises.

The Battlefield Commission consists of Col. J. W. Hawley, of Media, Pa., President; Col. Oliver C. Boshysell, of Philadelphia, Secretary; Gen. William J. Bolton, of Philadelphia.

Col. Hawley was wounded in the neck at the battle. The ball just escaped the jugular vein and is still lodged in the back part of his neck. The X-ray has located the bullet exactly. An operation for its extraction would prove fatal.

Gen. Bolton was shot while, as Captain, he was making a charge on Burnside Bridge. The bullet went through one side of his face and came out on the other side. The marks are still visible. Two years later, in front of Petersburg, he was shot in precisely the same place, but the ball took a downward course and lodged in his throat. Seventeen years afterward he coughed it up. He now wears the bullet as a watch chain.

THE MANASSAS MANEUVERS.

The general opinion is that the mimic campaign recently completed on the Plains of Manassas was worth much more than its cost. In spite of the jibes about dress-coats, champagne, and automobiles there was a great deal of real hard work done, and the officers and men were given instruction such as they could obtain in no other way. The experience of entraining and detraining troops and the management of great numbers of men on the field and of caring for them in a sanitary way was of the highest value. The men themselves got a much needed experience in camp life, their health was benefited by the open-air exercise, and they learned a great deal about caring for themselves under new conditions. All these go toward perfecting manhood, and every man who participated in the maneuvers has come out a better developed man than he would have been without it.

A great moral advantage was secured in bringing together men from widely separated parts of the country and getting them acquainted with one another, thus producing a higher Americanism. There is much criticism, of course, in the papers about the rawness of the militia. Probably most of this is brought about by the natural disposition of the Regular Army officers to exaggerate their own importance and the superiority of their methods. Undoubtedly many of the city companies were quite green when they got into the field, and failed at first to appreciate the conditions, but with the intelligence of the young men who formed those companies learning would be very rapid, and much more beneficial when learned for themselves. They had only to see a thing done to understand it. It is admitted on all sides that this was the case, and that when it came to practical things the militiamen were only at first behind their comrades in the Regular Army, and they readily caught up to them.

CONDITIONS IN PANAMA.

Minister Barrett, of Panama, has made a report which is of much value at this time. In the first place, he warns young Americans against rushing to the Isthmus unless they have employment secured in advance. After all, there will not be more than 25,000 men employed on the canal, and this number will not be reached until the latter part of the work; probably not for some years. Consequently, there are not going to be the opportunities for outsiders that some of them anticipated. There will be a crowd of fakirs and gamblers, who will rush there to get the wages of working men by all manner of schemes and devices, and this element will be something of an annoyance to the authorities. On the other hand he says that the horrors of the climate have been greatly exaggerated, the nights are cool and the days not terribly hot, and, furthermore, there is no malaria nor yellow fever among the whites. When the present plan of sanitation is completed there is no reason why the Isthmus should not be one of the healthiest places in the world.

ANOTHER grief for the Anti-A. The conditions in the Philippines have improved so agreeably that it has been recommended that the force of American soldiers now stationed there be reduced from four regiments of cavalry and nine of infantry to three of cavalry and seven of infantry.

THE WAR IN THE EAST.

As might have been expected both the Japanese and Russians have remained very quiet during the past week. Physical exhaustion, and the exhaustion of supplies must have checked this. The Japanese must have simply worn themselves out in their efforts to surround and capture the great Russian army. Their commissariat must have been drained of the last crumb of supplies, their limber chests and batteries broken down and disabled. Carts and wagons must have been wrecked and the railroads and common roads in a terrible state. On the other hand, the Russians in addition to their physical exhaustion must have equally badly off. They had to abandon large stores of supplies at Liao-Yang. How much of these they succeeded in destroying and how much they left for the use of the Japanese is a question. At all events they were lost to the Russians. This loss must have been greatly increased by the fearful retreat over wretched roads where trains and trains must have had to be abandoned, and all sources of supplies seriously disrupted.

It has been estimated by the European experts that the Japanese will not be ready for another advance for at least one month, during which time the Russians will have an opportunity to gather themselves together and offer battle again.

There is a concurrence of belief that the Russians will abandon Mukden without serious resistance, as soon as the Japanese advance in force. Mukden is in an open plain, without capabilities of withstanding a siege. The next struggle will occur it is believed at the Tie Pass, about 40 miles northeast of Mukden. Mukden is in the broad valley of the Hun River which opens out into the much broader valley of the Liao River. Forty miles northeast, the Liao River makes an abrupt turn from its southeastern direction to the southwest through the foot hills of the great dividing range, separating the water sheds of the Liao and the Sungari. The railroad takes advantage of this gap—The Pass or Tieling—to get up into the mountains, which it ascends on its course toward Harbin, 350 miles to the northeast. For over 150 miles the railroad runs through the mountains, and then descends into the valley of the Sungari at Chang-Chung-Fu. This will become the debating ground of the future. If the Russians can successfully hold Tie Pass they will have a gateway by which to return to Southern Manchuria. If the Japanese push them back from the pass and through the mountains, the Japanese, on the other hand, will have at Chang-Chung-Fu a gateway through which to advance on Harbin.

A study of the map shows that the mountains are favorable for the Japanese flanking the Russians out of Tie Pass and compelling them to retreat back into the mountains. The Japanese can follow up the valley of the Liao, which is the main highway for the winter trade, and flank Tie Pass on the left while striking at the railroad in its rear. There are reports, which are not generally credited, that they are already moving up the valley to the left, and the west of Mukden, to flank the Russians out of that place. If they are already in shape to move by a continuance of the banking movement they will be able to compel the abandonment of Tie Pass also. If they are in any shape for movement it would be good policy to do so before the Russians become settled in fortified positions.

A PROBABILITY.

The high ridge between the watersheds of the Sungari and the Liao will soon become, if it has not already, the dividing line between the Russian and Japanese armies. Both sides are terribly exhausted and crippled by a long continuance of supreme efforts. It looks as if they would have to rest for months, if not for the winter. The Japanese will, of course, take Port Arthur before they stop. They will then have possession of all Southern Manchuria, a fertile country of great resources, say as large as the States of West Virginia, Ohio, Indiana and Illinois combined.

There is no reason why they should take another step forward.

They can take up a defensive attitude, and throw the whole burden of continuing the war upon Russia.

The Japanese will then have gotten all that they could possibly expect out of the war. With Korea they will have room for all their surplus population for the next 100 years.

The dividing ridge between the watersheds of the Sungari and the Liao makes a splendid boundary, and easily defensible. The Japanese can hold it with immensely less effort than the Russians can attack it.

Mukden is 125 miles from New Chwang, and 200 miles farther from Port Arthur. It is an excellent administrative center for the country around it, and has occupied such a position for many centuries. From it the Japanese can readily control all the country up to where the sphere of influence of Harbin begins. It is about 300 miles from Mukden to Harbin. The Russians must hold Mukden, to control communication with Vladivostok and the Pacific coast.

Therefore, while Harbin is some 5,000 miles away from Moscow, we can rely upon the Russians making the most extraordinary efforts to defend it.

On the other hand, the moment the Japanese attempt to pass the ridge toward Harbin they will encounter difficulties surpassing anything they have so far met and overcome. They will be getting much farther away from their base of supplies, while at the same time they will meet an augmenting Russian army, much nearer its base of supplies.

Therefore, there is great probability that the war will end with the Japanese holding Manchuria to the dividing ridge between Mukden and Harbin, and keenly alive to the difficulties of advancing beyond it, while the Russians will hold the country from Harbin south to the ridge, and recognize the impossibility of pushing the Japanese back from it.

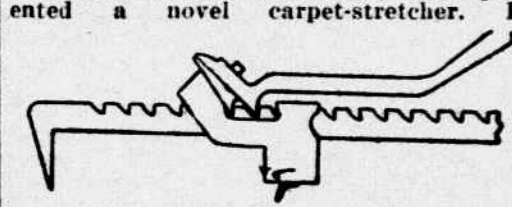
SOME of the Canadians are sprinkling a little cold sense upon the shriekers for "Canada for Canadians." It is pointed out that a great many Canadians have secured profitable positions in this country, and if the Americans who are holding positions in Canada are turned out it will be found to be a game that two can play at, with the Americans holding the most cards.

SCIENCE AND INVENTION.

Work of the World's Busy Brains in Discovering, Inventing and Creating.

A CARPET-STRETCHER.

Martin E. Skian, Chicago, has patented a novel carpet-stretcher. It

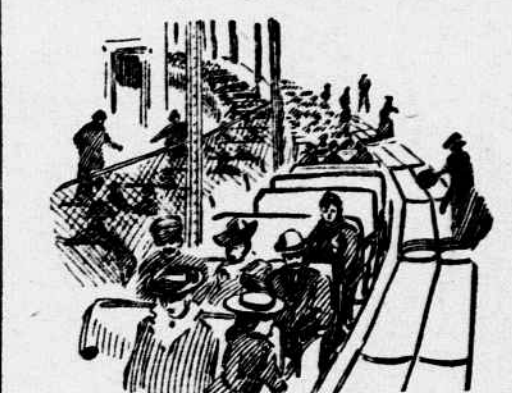


works on the screw principle. The rack-bar A catches on the floor, the point C engages the carpet, and by rotating the handle E the carpet is stretched.

TESTING EGGS.

A new and simple method for testing eggs is published in German papers. It is based upon the fact that the air chamber in the flat end of the egg increases with age. If the egg is placed in a saturated solution of common salt it will show an increasing inclination to float with the long axis vertical. A scale is attached to the vessel containing the salt-solution, so that the inclination of the floating egg toward the horizontal can be measured. In this way the age of the egg can be determined almost to a day. A fresh egg lies in a horizontal position at the bottom of the vessel; an egg from three to five days old shows an elevation of the flat end so that its long axis forms an angle of 20 degrees. With an egg eight days old the angle increases to 45 degrees, and with one three weeks old to 75 degrees, while an egg a month old floats vertically upon the pointed end.

A continuous train of seats on a moving sidewalk has been suggested as the method of solving the transportation problem of New York and Chicago. The device is something of an endless street-car, the passenger can enter anywhere he desires. It is proposed to use the system in New York in connecting the Manhattan terminals of the three great bridges over the East River with one another, and with the subway and elevated railroads, as well as with the principal surface lines running north and south. The moving seats are simply an improvement on the moving sidewalk, and the platform is a continuous platform of seats, which is moving at the rate of about three miles an hour, and the other at six miles an hour. The passenger steps from the ground to the lower platform; then to the one moving at six miles an hour; and finally to the platform containing the seats, which is moving at nine miles an hour. The seats are designed to hold three persons, and are placed three feet apart.



THE EFFECT OF OPEN AIR EXPOSURE.

Leon Thomas has been conducting experiments in Belgium, with large quantities of dynamite in order to test its effect upon surrounding objects. The results were erected around, at distances ranging from five to 5,000 meters (16 feet to three miles) 50 fixed or movable screens and two cabins of wood covered with tiles, with doors and

glazed windows. The amount of dynamite exploded ran from 50 pounds to a ton. The effect of this was found to be limited to a very small area. The discharge of 50 pounds was only felt at a distance of 58 feet, while that of a ton extended to but 125 meters, or 410 feet. Beyond that distance the only effect was caused by the rush of air to the point of explosion, to take the place of that which had been lifted up. In the cabins the windows were broken outward, the panes of glass falling inwards. The accompanying diagram illustrates this. The dynamite forces upward a volume of air, and then there is a rush of other air in to take its place.



THE METRIC CONTROVERSY.

Very many people wish to give our intricate and confusing system of weights and measures the scientific simplicity of our monetary system. This can be done by the adoption of the metric system, which has generally been adopted by all the civilized nations and many of the semi-civilized outside of the United States and Great Britain. By so doing we would therefore conform to the better usage of ideas with those to whom we want to sell goods. If we are going to sell goods to the whole world we must measure by the meter and weigh by the kilogram. On the other hand, it is a mistake to claim that our machinery and manufactures have been built up upon the present system and that a change would be exceedingly expensive everybody. They also claim that the inch is much better standard than the meter, and its subdivisions, and that 12 is a better multiple than 10. Twelve may be divided in six different ways, while 10 is only divided by two. The fact is, however, that the metric system is better adapted to the needs of the world, and it is likely to grow better, as both sides are getting more determined.

BIRDS THE FARMERS' FRIENDS.

Col. Isaac W. Brown, the Hoosier Schoolmaster and bird lover, was seen to Texas by Miss Helen Gould to see if he could not apply his knowledge to the extermination of the boll-weevil, and he is now preparing his report to Miss Gould. His motto is "Every bird has its bug, and the weevil is the bug of the cotton-wool grower." He says that the presence of the boll-weevil in such large numbers is wholly due to the killing of the birds, and if they were left alone and not exterminated, the weevil would be exterminated. He says that the weevil is the natural food of the quail, lark and the dove, which are most hunted in Texas. The best of all these is the quail, which is always the best scavenger, and the most prolific breeder, one pair raising from 30 to 40 young in a year. In Texas, unfortunately, there seems to be a shotgun for every bird. Next in value to the ground scavenger birds is the dove, which is slaughtered every year by the 10,000. The red bird has a natural taste for the potato bug, but the red bird is not allowed to live. In many sections the quail is a pest, but one flier or red-breasted woodpecker will eat 5,000 for a meal. If people want to get rid of ants the best thing is to encourage the woodpecker. The martin is the particular enemy of the maggot, and if there were 100,000 in New Jersey they would eat 15,000,000 mosquitos a day, and soon the State would be rid of the pest.

SCIENTIFIC NOTES.

Protective mimicry has a curious illustration in an insect of British East Africa described by Prof. Gregory. Some individuals of each sex are bright pink and others are bright green, and as they sit motionless for hours sucking sap, the pink ones are mistaken for the green ones, and while they look like drooping flowers, while the green ones take a place further out and are mistaken for foliage.

Ever since the beginning of the work of dredging out the mouth of the Mississippi according to the Eads plan there has been a great deal of trouble about the disposition of the silt dug up by the dredges. It has been loaded upon barges and then taken out to sea, but this method